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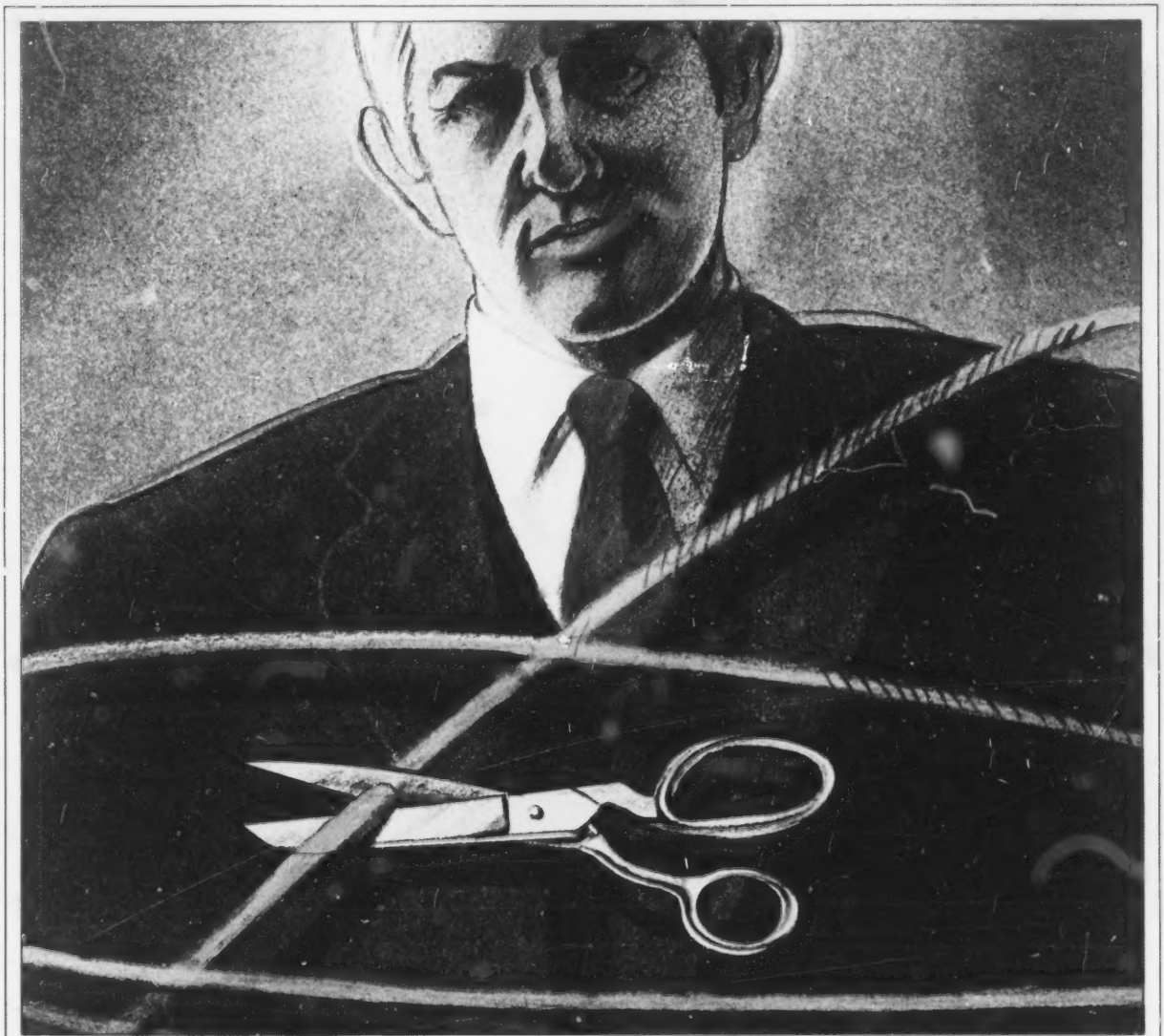
Sixth Annual Hay Report
Executive Compensation

The Wharton Magazine

Participation In Management: When Does It Work?

The Dynamics Of Technological Development

Japanese Bosses In America: How They Manage



Contestability: Challenging the Myths of Competition

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The Wharton Magazine Economic Newsletter

Econometric Forecast

For the United States, 1982.3—1984.2

Prepared by
Lawrence R. Klein, Donald Straszheim, Allen Gutheim, Stephen Able, John Savacool, Wayne Tarken, Mark French, Thad Fletcher, Dave Horton, and Clare Donohue
Wharton Econometric Forecasting Associates

Price Index Slows; Some Growth Seen

The recent interest rate decline has been breathtaking. Since midyear, the bank prime has fallen to 13.5 percent, and the discount rate to 10 percent. Long-term rates have also declined, although not by as much. The financial situation remains precarious, but the heat is off many firms.

Second quarter growth was a modest 1.3 percent. Third quarter real growth in gross national product is estimated at 2.5 percent, with the fourth quarter at 4.5 percent. Annual 1983 and 1984 figures are forecast at 3.9 percent and 4.6 percent.

A three-year $98.3 billion tax bill has been enacted – keeping the deficit from ballooning even higher. Inflation has been reduced sharply over the last year, but at high cost – 9.8 percent unemployment, housing starts under 1 million, and auto sales near 7 million.

In recent months, the proposition – long advanced by some on Wall Street – that interest rates would spike to new highs late in 1982 became increasingly implausible. Four fundamentals point in the other direction.

☐ The economy has yet to come to life. Employment and industrial output were still declining in July.

☐ Inflation has been convincingly reduced from the 8-13 percent rates of 1978-1981 Resurging inflation will not be a serious threat at least through 1983.

☐ A $98.3 billion tax bill has been enacted, raising hopes that the federal deficit will eventually come under control.

☐ The money aggregate M-1 is within its target range, easing fears of further Federal Reserve tightening.

Much of the decline in short-term interest rates is already history. Our forecast shows an essentially trendless path of short rates through 1983. Some further rate declines are anticipated in 1984. The short-run volatility in rates, characteristic since the Federal Reserve's late-1979 change in monetary policy operating procedure, is expected to persist.

Long-term rates will drop further. The Moody AAA seasoned bond rate is expected to decline to 12.8 percent at the end of 1982, and to 12.0 percent and 10.3 percent at the end of 1983 and 1984 respectively.

An increase in bank reserves has contributed to the interest rate decline, but our assumption remains that the Federal Reserve will continue to restrain money growth to keep inflation in check over the long haul.

Money growth has been within the policy targets since the last week in June. Over the last four weeks, however, money growth has moved toward the top of the targets – a matter that merits careful monitoring.

Even before the interest-rate break, an increase in output had been forecast for the last three quarters of 1982 – due to the stimulative effects of the midyear tax cut and a rebuilding of inventories. The interest rate decline will increase the strength of the credit-sensitive sectors.

Housing has been recovering since the October 1981 low point of 0.854 million starts, and recent developments offer further encouragement. The short-term interest rate decline will reduce deposit costs at lending institutions, allowing mortgage rates to ease also. FHA-VA insured mortgage rates have been cut to 14.0 percent. Our forecast anticipates housing starts averaging 1.2 million units at the end of 1982, rising to 1.8 million at the end of 1984.

No improvement is visible in the automobile sector. June and July sales rates were 7.0 million and 7.4 million, with a record 30 percent import share aggravating the situation for domestic producers. An auto sales rate of 8.4 million in the fourth quarter of 1982 is expected, rising to 11.5 million at the end of 1984.

Passage of the tax bill on August 19 raised taxes by $98.3 billion over three years. The distribution of these tax revenues is approximately as follows: Corporate taxes will rise by $35 billion. Individual income taxes will rise by $11 billion. Excise taxes and user fees will rise by $11 billion.

Wharton Econometrics is pleased to announce the inauguration of a weekly newsletter, Economic News Perspectives.

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Improved compliance and collection procedures, including withholding against dividend and interest income, account for the remainder of the revenue gain.

Part of the increase in business tax revenues stems from the repeal of two provisions enacted in the Economic Recovery and Tax Act of 1981: The safe harbor leasing provisions will be repealed after 1983; and the accelerated cost recovery system for asset depreciation will be repealed for 1985 and 1986. Whether business investment will be raised prior to 1985 – to take advantage of the current depreciation rules – is an open question.

On a fiscal year basis, the tax changes total $18 billion in 1983, $38 billion in 1984, and $43 billion in 1985.

The federal deficit in our forecast has not changed materially as a result of this new tax legislation, because many of its provisions had already been assumed. Our estimate of the deficit is $135.0 billion in fiscal 1983 and $122.4 billion in fiscal 1984. Efforts will continue for more tax increases and more spending reductions – to reduce these huge deficits.

The July consumer price index increase of 0.6 percent is representative of inflation performance over the next twelve to eighteen months. For 1982 our CPI forecast is for a 6.2 percent increase. For 1983 and 1984, we expect increases of 5.8 percent and 6.0 percent respectively.

All of the conventional explanations of inflation suggest that moderation will continue. With unemployment still high and capacity utilization low, no demand-pull pressures will be evident until well into 1984. Although the inventory rundown – which has been pushing prices down dramatically – is ending, demand will remain weak, keeping industrial price pressures in check. Cost-push pressures have been moderating. Wage and benefit gains are slowing. Cyclical productivity gains will further restrain unit labor costs. Agricultural output is abundant, keeping downward pressure on farm prices. Energy prices will also tend to be moderate at least until 1984. The worldwide recession has reduced energy demand, and supplies are excessive.

Employment: Because of a

Forecast: The Next Two Years

Selected Economic Indicators — September 3, 1982

Economic Activity and Income	**1982.3**	**1982.4**	**1983.1**	**1983.2**	**1983.3**	**1983.4**	**1984.1**	**1984.2**
Real Gross National Product $ (1972)	1484.6	1500.9	1515.0	1530.7	1548.4	1566.2	1582.6	1599.6
% change	2.5	4.5	3.8	4.2	4.7	4.7	4.3	4.4
Gross National Product $	3105.6	3189.0	3263.8	3343.1	3429.3	3525.2	3614.3	3709.8
% change	8.7	11.2	9.7	10.1	10.7	11.7	10.5	11.0
Industrial Production (1967 = 100)	138.2	139.4	141.2	143.1	145.7	147.9	150.5	153.4
% change	−2.7	3.5	5.2	5.5	7.5	6.0	7.2	8.0
Unemployment Rate %	9.8	9.4	9.2	9.1	8.8	8.6	8.6	8.4
Personal Savings Rate %	8.7	8.1	7.3	6.7	7.8	7.4	6.7	6.3
Auto Sales (millions)	7.3	8.4	9.0	9.7	10.1	10.7	11.1	11.1
Housing Starts (millions)	1.11	1.23	1.29	1.35	1.41	1.51	1.58	1.64
Current Account Balance $	4.9	5.2	−0.2	−1.8	−3.3	−3.3	−8.5	−8.3
Real Disposable Income $ (1972)	1079.4	1088.0	1090.6	1095.7	1121.0	1128.4	1130.6	1135.2
% change	9.1	3.2	1.0	1.9	9.6	2.7	0.8	1.7
Aftertax Corporate Profits $	130.4	135.9	134.8	141.8	149.7	154.6	162.7	169.4
% change from year ago	65.5	17.8	−3.3	22.6	24.2	13.6	22.7	17.6
Federal Surplus $	−160.6	−153.5	−131.2	−122.2	−153.8	−143.0	−130.8	−121.3
Components of Gross National Product								
Real Consumption Expenditures $ (1972)	956.6	970.4	980.7	991.7	1002.2	1013.6	1022.2	1030.6
% change	1.2	5.9	4.3	4.6	4.3	4.6	3.5	3.3
Real Business Fixed Investment $ (1972)	161.8	159.1	158.2	158.9	159.9	162.2	165.2	168.7
% change	−10.5	−6.5	−2.3	1.7	2.5	6.0	7.6	8.8
Real Government Purchases $ (1972)	287.2	286.5	286.3	286.4	287.8	288.9	291.3	292.6
% change	3.6	−1.0	−0.2	0.2	1.9	1.6	3.4	1.8
Net Exports $ (1972)	34.9	34.7	34.2	34.4	33.9	34.1	34.0	35.4
Inflation and Determinants								
GNP Deflator (1972 = 100)	209.2	212.5	215.4	218.4	221.5	225.1	228.4	231.9
% change	6.0	6.4	5.7	5.6	5.7	6.7	6.0	6.3
Consumer Price Index, % change	7.4	6.0	5.7	5.6	5.1	5.6	6.4	6.4
Producer Prices, % change	7.5	5.9	6.6	6.2	6.4	6.8	6.9	7.2
Average Hourly Earnings, % change	6.2	6.1	7.5	6.5	6.1	6.4	6.2	5.8
Financial Markets								
Federal Funds Rate %	10.8	11.2	12.1	12.0	10.6	10.2	9.8	9.8
3-Month Treasury Bill Rate %	9.7	9.7	10.4	10.4	10.2	9.9	9.4	9.4
Moody's Seasoned AAA Bond Rate %	13.9	12.8	12.9	12.9	12.5	12.0	11.5	11.0

[$ amounts in billions. All $ figures are current dollars except those marked $ (1972)]

significant increase in the labor force, the July unemployment rate rose to 9.8 percent, the worst in forty years, as employment declined fractionally. There are 2.97 million more people unemployed now than one year ago.

Housing: Housing starts rose in July to a 1.211 million annual rate, the highest rate since April 1981. Permits also rose sharply to 1.103 million. These encouraging gains were largely a result of one-time increases in multifamily government subsidy programs – so starts in August will be lower.

Nonresidential Fixed Investment: In July, nonelectrical machinery output was 19.6 percent lower than a year ago, with electrical machinery output down 5.3 percent. Contract construction employment fell again in July. Nondefense capital goods orders rose by 10 percent in July but were still nearly 14 percent below July 1981. This lagging sector of the economy is expected to continue to slide well into 1983.

Inflation: The July 0.6 percent consumer price index rise (to 6.5 percent above a year ago) is generally representative of what is expected through 1983. Producer finished goods prices also rose by 0.6 percent in July. Average hourly earnings were still moderating in July and were 6.9 percent higher than a year ago – the lowest year-to-year advance since June 1976.

Corporate Profits: Second-quarter corporate profits after taxes showed a slight decline in the government accounts. Profits will improve quite smartly during the recovery – but a long decline needs to be recouped.

Exchange Rates: The recent decline in U.S. interest rates has dulled the previously strong dollar.

Government: A $98.3 billion tax increase spread over three years was voted on August 19. Deficits will remain high for the foreseeable future. During the first ten months of fiscal 1982 (through July) the federal deficit was $94.3 billion, up from $59.2 billion in the comparable fiscal 1981 period.

Money and Credit: The sharp interest rate decline has ignited a debt and equity market rally. Monetary policy will remain relatively tight, keeping the speed of the recovery in check. ■

1981	1982	1983	1984
1502.6	1482.9	1540.1	1610.2
1.9	−1.3	3.9	4.6
2937.7	3082.8	3390.3	3762.2
11.6	4.9	10.0	11.0
150.9	139.6	144.5	155.2
2.6	−7.5	3.5	7.4
7.6	9.4	8.9	8.1
6.4	7.6	7.3	6.1
8.5	7.8	9.9	11.3
1.10	1.05	1.39	1.69
4.5	5.1	−2.2	−10.8
1043.1	1067.6	1108.9	1139.7
2.5	2.4	3.9	2.8
150.9	124.3	145.2	173.4
−4.4	−17.6	16.8	19.4
−60.0	−138.9	−137.6	−117.5
947.6	957.5	997.0	1035.9
1.8	1.0	4.1	3.9
172.0	164.8	159.8	170.8
3.5	−4.1	−3.1	6.9
287.1	286.9	287.3	293.8
0.9	−0.1	0.2	2.2
42.0	35.5	34.1	35.9
195.5	207.9	220.1	233.6
9.4	6.3	5.9	6.1
10.3	6.3	5.8	6.0
9.3	4.2	6.1	7.0
9.6	7.7	6.6	6.2
16.4	12.7	11.2	9.7
14.0	11.2	10.2	9.3
14.2	14.0	12.6	10.8

Perspectives On The World Oil Market

By F. Gerard Adams, Jaime R. Marquez, and Vahan Zanoyan

The past year has seen drastic shifts in the world oil market. From a situation of potential oil shortage and sharply rising prices – the so-called "second oil shock" of 1979-1980 – the world market has swung to glut and price weakness. Expectations about oil prices have changed significantly, but it may be premature to predict a return to the happy days when energy was abundant and cheap. Much depends on the mechanisms which determine the price of oil and the stability of the world oil market.

As the OPEC countries see it, they are trying to "make the most" out of their oil resources – that is, to maximize the present value of their oil export revenue streams. Although, at some times in the 1970's, we might have thought there was no limit to how high the OPEC countries could raise the price of oil, there are important constraints. Increasingly, the oil producers are aware of these limits. Higher oil prices have resulted in:

- cutbacks in oil consumption as consumers and producers conserve energy,
- reductions in energy needs as the industrial economies are pushed into recession by high petroleum costs, and
- increased development of non-OPEC oil supplies and use of alternate energy sources such as coal, nuclear power, and even renewable sources like solar energy.

Reasons for Increase

In the short run, oil price movements have reflected actual and perceived balance between demand and supply. The supply shortage at the time of the war between Israel and Egypt in 1973, and the crisis in Iran in 1979, sharply raised the spot price of oil – this is the price of cargoes of crude oil bought in the open market. Official oil prices followed the spot market prices upward. With the aid of hindsight, it appears that oil price increases have not been so much the result of explicit decisions by OPEC to limit output and raise price as they have been the result of a ratchet process, one which raised prices at the time of spot market shortages and prevented them from declining thereafter.

OPEC is not a cohesive group of countries which can easily make common decisions. All the countries share the fact that oil revenues are used to finance their development. But in many respects this is the end of their similarity. Some OPEC members – the so-called "high absorbers" – have a large need for oil revenues. These countries have large populations and large development needs. They are also the countries with relatively lower oil reserves. Algeria, Iraq, Iran, and Nigeria, among others, are high absorbers. On the other hand, countries with small populations like Kuwait, the United Arab Emirates, and Saudi Arabia have lower needs for oil revenues. The "low absorbers" also have the largest

Detailed forecasts of the U.S. and world economies are available on a fee basis from Wharton EFA. Enquiries should be directed to: Business Manager, Wharton EFA, 3624 Market Street, Philadelphia, PA 19104.

Figure 1: World Crude Oil Supply and Demand Balance

Apparent Consumption	1980	1981 (estimates)	1982 (forecast)	1985 (forecast)
OECD	34.85	32.20	30.40	32.65
OPEC	2.44	2.60	2.70	3.52
Other Less Developed Countries	9.17	8.40	8.60	9.93
Total	46.46	43.20	41.70	46.10
Supply				
OPEC	26.90	22.55	19.20	25.56
Non-OPEC Developed Countries	12.86	12.91	13.35	12.90
Non-OPEC Less Developed Countries	5.46	5.98	6.52	7.54
From Centrally Planned Economies (Net)	0.87	0.97	1.15	0.40
From Stocks	0.37	1.29	1.48	—
Total	46.46	43.70	41.70	46.10

(millions of barrels per day; excludes centrally planned economies)

oil reserves.

The "high absorbers" prefer higher prices and higher export volumes today to finance their industrialization plans. Recently, many have been badly hurt by declines in oil export revenues as they have found it increasingly difficult to sell their high-priced oil. The "low absorbers" have a longer time perspective; they prefer lower prices to assure the long-run viability of the oil market and to protect their financial investments in the oil-consuming countries. They are able to cut back on exports with little damage to their economies. Saudi Arabia is, of course, the biggest OPEC oil producer, the most able to hold back or to increase production, and the most eager to stabilize oil prices. The disparities in oil reserves and needs for oil revenues are central to understanding OPEC pricing and the disagreements among its members.

Recent Developments

The glut and price weakness in world crude oil and oil products markets over the past year are a reflection of short-term demand and supply forces:

□ the significant decline in oil consumption, particularly in the major industrial countries;

□ an inventory adjustment process bringing excessively high inventories down toward more normal levels;

□ the production policy of Saudi Arabia, the other OPEC countries, and the producers outside OPEC; and

□ surpluses of refining, transportation, and distribution capacity in the United States and in Europe.

The decline in oil consumption was most dramatic in the major industrial countries. For the industrial OECD countries as a whole, consumption of oil is expected to decline in 1982 by 4.4 million barrels per day from its already reduced 1980 level (see Figure 1).

These declines reflect, on one hand, a belated adjustment to high oil prices. It turns out that the so-called "energy elasticity pessimists" were wrong. These experts had argued in the mid-1970's that the cutback of oil consumption in response to higher prices would be very small; they predicted very low price elasticities in the range of 0.1 to 0.2. In recent years, all classes of energy users have been cutting back on oil consumption – by installing more efficient industrial processes, by insulating their homes, and by shifting to alternate energy sources. Such a process takes time, and that explains the difference between elasticity pessimism and optimism. It is largely a matter of waiting long enough for the adjustments to high oil prices to take place. A good illustration is the gradual way in which the old gas-guzzling cars are gradually being scrapped as they wear out and are being replaced by smaller automobiles which have much higher gas mileage. Gasoline consumption in the United States has declined by 7.1 percent during the last two years, still reflecting the price increases of the 1970's. The current softness of pump prices of gasoline will ultimately affect consumption, but only if it persists.

It is difficult to disentangle the influence of price from the equally important effects of economic activity in general. The slowdown of the world economy and the recession in the United States, themselves in large part a consequence of the oil price shocks, have greatly reduced industrial activity, and consequently also have reduced consumption of petroleum products. In addition, there has been an important inventory readjustment. At the time of the "second oil shock" in 1979-1980, everyone was scrambling to build higher inventories in expectation of higher prices. In 1981 and 1982, on the other hand, a process of inventory decumulation is taking place. There is no longer need to hold large inventories of oil. On the contrary, expecting that prices will be weaker and bearing very high interest costs, oil distributors and refiners are trying to dispose of their excess inventories, and requirements for crude oil production have therefore temporarily fallen below current consumption.

Oil Glut Persists

The glut of oil has persisted despite significant cutbacks in total OPEC production. From 26.9 million b/d in 1980, production dropped more than 4 million b/d to 22.6 million b/d in 1981, and production has been cut to approximately 18 million b/d in mid-1982.

Recent developments give a particularly striking picture of the role of Saudi Arabia in OPEC and of the interrelationships among the OPEC member countries. Last year, Saudi Arabia had sought to restrain the increase of oil prices by keeping its "marker" Arabian light crude at a price of $32 per barrel while the prices

of other crude oil, particularly from Libya, Nigeria, and the North Sea, had been raised to levels approaching $40 per barrel. As the surplus of oil supplies built up, Saudi Arabia refused to cut back production from 10.5 million b/d, a level some 2 million b/d higher than its original plan. During the course of the year, producers who had raised prices found their markets drying up. Nigeria, for example, went from more than 2 million barrels per day to 0.7 million b/d. Mexican and Libyan exports fell approximately by half. Reduced export earnings caused severe strain in the more populous countries which had come to rely on their oil revenues. One after another, surcharges were eliminated and prices reduced. In October 1981, Saudi Arabia persuaded OPEC to establish a common base price for OPEC oil ($34 per barrel), a long sought after objective.

Spot Prices Falling

Early this year, on the other hand, there appeared to be some basis for arguing that OPEC had lost control of supply, as the production of some OPEC members increased and the glut of oil in world markets built up. Spot prices fell to $27 in some cases. A number of significant price cuts have been made which threaten Saudi Arabia's ability to maintain the $34/bbl. price.

An emergency meeting of OPEC in Vienna in March reaffirmed the $34 price for the so-called "marker" crude (Saudi Arabian Light) and announced a total OPEC production ceiling with specific production quotas for each OPEC member country. The ceiling was set at 18 million b/d, but after the session Saudi Arabia announced a further cutback of 0.5 million b/d.

In the months immediately following the Vienna conference, oil production declined sharply and spot prices began to strengthen. Some observers thought that OPEC had firmly established its control. But recently production has been running above the OPEC ceiling and spot prices have again weakened. Iran has exceeded its production quota by 1 million b/d and Libya and Nigeria by lesser amounts. Other OPEC members have protested price discounts and overproduction. An inconclusive meeting in Vienna in July suggests that discipline can not be rigidly enforced.

Uncertain Prospects

There are many outstanding questions. Will the current glut cause the price of oil to come down significantly? Will there be a collapse of the OPEC cartel? Will oil prices fall back to the levels of the early or middle 1970's?

The prospects for world oil prices are obviously uncertain. There is a chance, a slim one, that OPEC will not be able sufficiently to control supply. The other producing countries may have to "make room" for increased shipments from Iran, which is trying to rebuild its oil industry now that its military position has improved. The critical issue, then, for the short run is how much and for how long the Saudi Arabians and their Gulf neighbors can hold back output. They may well be able to "wait out the glut" as they have proposed to do, maintaining the official $34 per barrel price.

A longer term forecast must recognize that the weakness of current demand is partly temporary. The drawing down of inventories will not continue much longer. And oil consumption may again begin to increase once the hoped-for recovery of the world economy gets under way. Demand for oil by the industrial economies will rise above current depressed levels, although even by 1985 it will be only a little higher than it was in 1981. Oil requirements in the less developed countries will grow substantially. Since the inventory decumulation will be over and since the centrally planned economies will cut back their deliveries of crude oil (though not of natural gas), demand for OPEC oil is expected to rise by 3 million b/d. Even that is only back to 25.6 million b/d, far below the previous peak of about 31 million b/d. In the absence of another supply disruption, even with recovery in the world economy, upward pressure on oil prices will be moderate. The OPEC countries will need to take measures to hold supplies in line with demand.

Under these circumstances, any forecast of oil prices is precarious. In the short run, it is possible that there will be further downward adjustments, possibly even in the official OPEC prices. A large drop in prices is possible, but unlikely. It would occur only if the OPEC countries entirely lose control of supplies and begin to compete freely with one another for markets. Before that happens, further cutbacks can take place in production from Saudi Arabia and the other southern Gulf producers.

Prices and Inflation

Over the longer time horizon, the best one can do is to make a noncommittal forecast, one which recognizes the fact that there is a great deal of uncertainty and which assumes continuation of present institutional arrangements with respect to OPEC and the international oil companies. Such a forecast, which assumes that demand and supply will not go significantly out of balance in either direction, is for the real petroleum price (after allowing for inflation) to remain at its current level in the short run. As demand for OPEC oil recovers in the mid-1980's, oil prices may rise a little more rapidly than inflation rates. In view of expected inflation, even a conservative estimate would mean a nominal price in the $40/bbl. range in the mid-1980's (see Figure 2). ■

This article is based on data and forecasts prepared by the Middle East Economic Service of Wharton Econometrics, which is directed by Vahan Zanoyan.

Figure 2: Average Price Of OPEC Petroleum Exports

	Prices; Dollars per Barrel	% Change	% Change Adjusted for Inflation
Actual			
1980	31.0	65.8	47.1
1981	34.6	11.6	− 3.1
Forecast			
1982	33.3	− 3.9	−13.6
1983	33.7	7.3	− 5.6
1984	37.2	10.4	1.8
1985	42.0	12.9	4.7

Sixth Annual Hay Report on

Executive Compensation

This report on executive compensation is based on the Hay Compensation Comparison of more than 700,000 people in more than 1,000 U.S. companies. The Hay survey covers management positions from foreman to chief executive officer. Data from this survey are widely used by participants to establish pay practices and to manage their compensation programs.

Hay, an international management consulting organization with 80 offices in 25 countries, has conducted its Compensation Comparison since 1954.

This exclusive report, which appears in The Wharton Magazine *annually, covers executive compensation by 1) level of management, 2) industry, and 3) company performance. It also features a forecast of future compensation trends and developments. The report was prepared by Alvin O. Bellak, General Partner, and Robert C. Ochsner, Partner, Hay Associates.*

LED by salary increase policies adopted the previous year under different economic circumstances, total compensation during the year ending May 1, 1982, rose faster than the cost of living. However, in line with the business recession, bonus and incentive payments to executives rose less than in the previous year. And, as 1982 progressed, pay freezes and reductions became increasingly common.

Consequently, the belief that compensation will increase every year has begun to be questioned.

Over the last twenty years, inflation grew steadily until it reached double-digit levels and became an everyday part of our lives and our thinking. The accompanying wage-price spiral drove compensation up rapidly; companies revised executive pay about as fast, but escalating tax brackets left most executives with lower purchasing power. A year ago, the first general tax cut since 1963 rekindled executive hopes of coming out ahead. As

Exhibit 1. 1982 Total Cash Compensation

INDUSTRIAL

Title[1]	Highest 10%	Median	Lowest 10%
Chairman & CEO	397[2]	326	268
President & COO	341	273	219
Division General Manager ($500 million division)	200	163	130
Division General Manager ($150 million division)	136	111	89
Corporate Controller General Manager, Manufacturing Director of Engineering	88	72	60
Plant Manager Regional Sales Manager Chief Auditor	62	52	35
General Foreman Design Engineer Accounting Supervisor	37	32	26

FINANCIAL

Title	Highest 10%	Median	Lowest 10%
Chairman & CEO	—[3]	—	—
President & COO	350	290	245
Head of Commercial Banking Head of Retail Banking	195	161	126
Head of Trust	130	106	82
Controller	77	65	53
Area Manager Commercial Loan Officer (national accounts)	55	45	38
Branch Manager Mortgage Loan Officer Trust Account Administrator	31	25	22

[1]For a full explanation of the evaluated title comparisons in the article see "How the Hay Job Unit System Works" on page 60.

[2]In thousands of dollars.

[3]There are not enough positions at this level for a statistically significant response.

we will see, the hopes were generally met in the past year; the future looks dimmer.

Exhibit 1 shows the range of salaries paid by the Hay survey companies. They describe a distinct salary marketplace: the top 10 percent pay about 50 percent more than the lowest 10 percent. Smaller differences might raise questions of collusion; larger differences might raise doubt that there is a coherent market.

Exhibit 2 shows the patterns of executive cash compensation increases for the last three years. In the year from early 1981 to early 1982, as measured by the 1982 Hay survey, salaries rose significantly – 11 to 12 percent in industry and 9 to 10 percent in finance. As in the preceding years, total cash compensation (salary plus incentive bonus) generally increased at a lesser rate than salaries. At upper levels, where bonuses are a significant part of the executive pay envelope, the differences in the rate of increase of salary and total cash compensation have become pronounced. Clearly, the increases in total cash were mainly the result of higher salary increases the last three years. Salary is 60 to 80 percent of total executive compensation.

Differences by Industry

As illustrated in Exhibit 3, executive pay shows distinct differences by industry. However, industry differences are smaller than the pay spectrum, indicating that there are low- and high-paying companies in every industry. Also, industry differences tend to be smaller at the "top of the house."

Banking and insurance have moved closer to the overall average in salaries, but lower incidence of incentive bonuses in these industries makes them less competitive in total cash.

Forecasts for the balance of 1982 and for 1983 predict distinctly smaller pay increases. The reasons are the business recession and the smaller increases in the consumer price index. These factors have been closely linked with past executive compensation trends.

Exhibit 4 shows how executive salaries have tracked the CPI for the past five years. Salary practices follow the ups and downs of inflation – usually bottoming out at 5 percent and rarely exceeding 14 percent – with about a one-year lag, approximating the time needed for a new salary policy to have effect.

The higher 1982 executive salary in-

Exhibit 2. Executive Cash Compensation Increases (%), 1980-1982

Title	1980	1981	1982
INDUSTRIAL			
Chairman & CEO	9.8 (11.0)[1]	5.1 (10.1)	8.7 (13.3)
President & COO	10.7 (11.7)	6.7 (11.4)	7.4 (12.8)
Division General Manager ($500 million division)	10.9 (11.7)	7.4 (10.5)	9.3 (12.0)
Division General Manager ($150 million division)	10.3 (9.6)	8.8 (10.4)	9.3 (12.3)
Corporate Controller General Manager, Manufacturing Director of Engineering	9.4 (10.4)	9.0 (9.7)	10.5 (11.8)
Plant Manager Regional Sales Manager Chief Auditor	9.5 (10.5)	9.8 (10.5)	10.6 (11.3)
General Foreman Design Engineer Accounting Supervisor	8.7 (9.9)	10.5 (10.7)	11.3 (11.3)
FINANCIAL			
Chairman & CEO	—[2]	—	—
Chairman & COO	11.2 (11.2)	8.6 (8.2)	13.7 (15.3)
Head of Commercial Banking Head of Retail Banking	9.9 (11.4)	12.2 (11.2)	12.8 (13.1)
Head of Trust	11.3 (11.0)	10.2 (13.3)	8.3 (9.0)
Controller	10.2 (11.0)	9.6 (11.5)	8.5 (9.3)
Area Manager Commercial Loan Officer (national accounts)	9.6 (10.7)	9.9 (11.9)	9.6 (9.4)
Branch Manager Mortgage Loan Officer Trust Account Administrator	7.9 (10.2)	9.2 (12.1)	9.4 (9.5)

[1]Increases in base salary in parenthesis.

[2]There are not enough positions at this level for a statistically significant response.

Exhibit 3. Executive Cash Compensation in Selected Industries

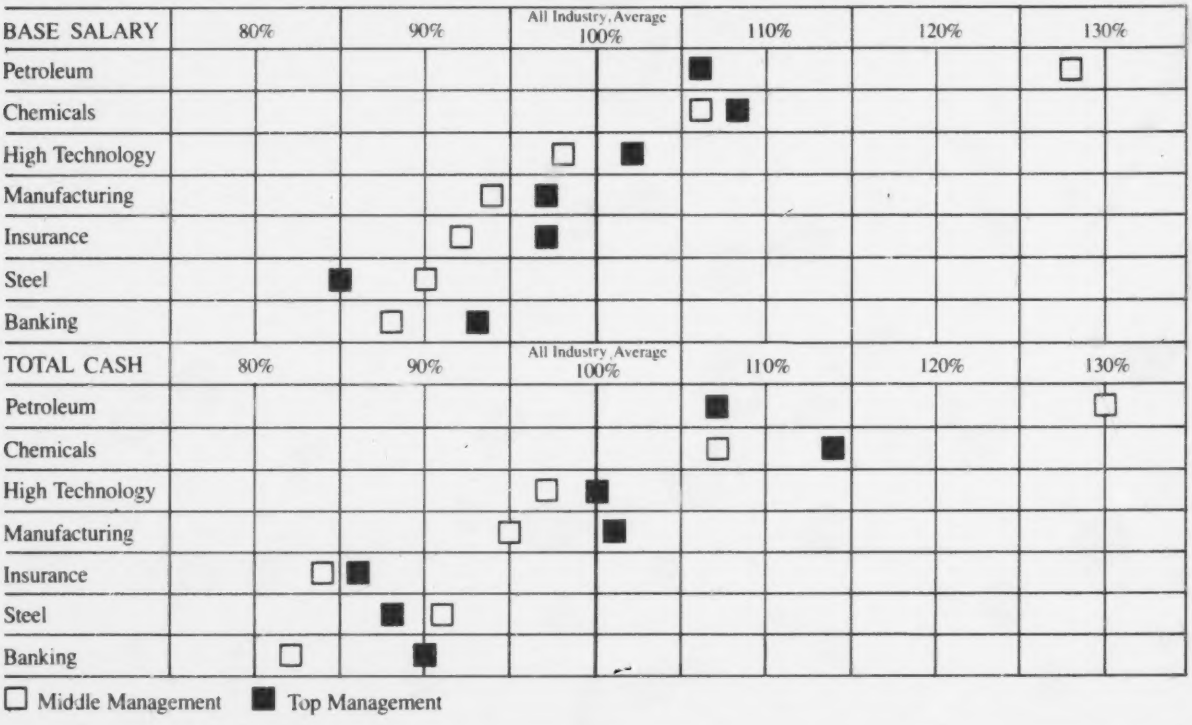
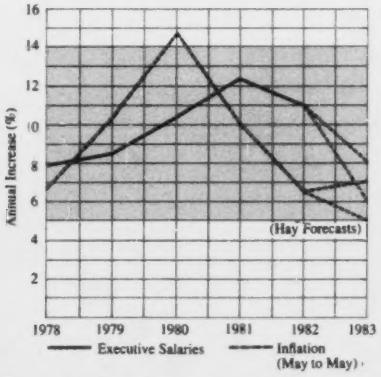


Exhibit 4. Changes In Executive Salaries Compared With Inflation Rates, 1978-1983



creases resulted from 1981 salary policy decisions made as a result of high 1980 and 1981 inflation rates. They may have been appropriate, if viewed as a "catch-up" to the preceding inflation, but they will not be repeated. The Hay forecast for 1983 of 6 to 8 percent increases raises the possibility that the lines will cross again, as inflation heads up while average salaries are still on the way down.

A phenomenon of 1982 has been the multitude of compensation cost controls introduced during our recessionary times: smaller pay raises, pay freezes, actual pay cuts, and the selective passing of individuals for pay increases altogether. In some regions and industries, up to 10 percent of management-level employees are expected to receive no merit increases this year, which would be more than twice the rate of recent years. Therefore, the predicted range of salary increases is lower than the 9 to 11 percent which has been typical of organizations' "policy" for increases in the last two years.

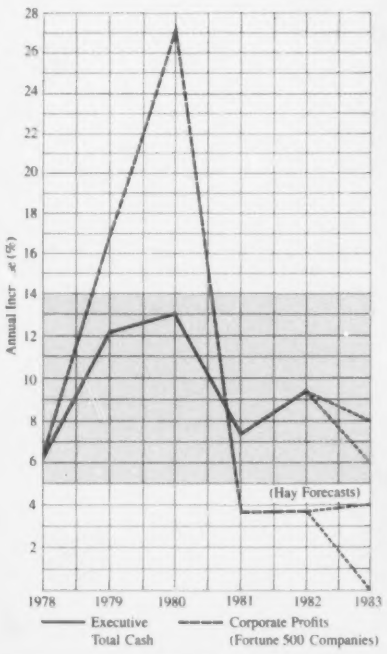
Exhibit 5 shows how executive total cash has tracked corporate profits over the past five years. As noted earlier, the 1981 to 1982 change of 9.4 percent was the result of 1981 salary increases driven by that year's inflation. Since this inflation factor will be absent in the coming year, we predict total cash increases of 6 to 8 percent.

Compensation and Profits

Percentage increases in total casn compensation at the highest level, that of the chief executive officer, will undoubtedly be smaller than for other management positions next year. With profits off 17 percent and 18 percent in the first two quarters of 1982 respectively, CEO compensation – with a large portion linked to corporate performance – will suffer.

Executive compensation includes *longer-term incentives* (LTI) as well as

Exhibit 5. Changes In Executive Total Cash Compared With Corporate Profits, 1978-1983

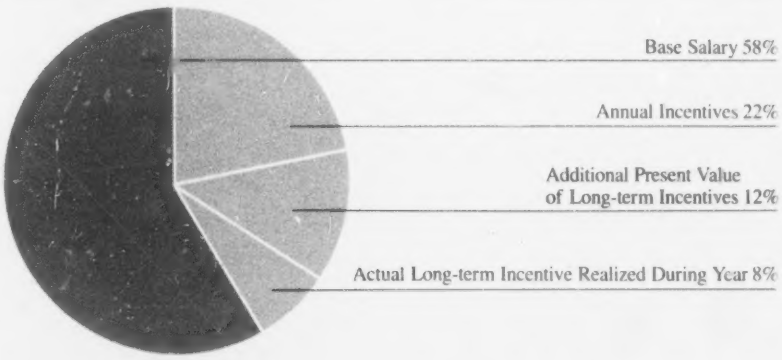


cash compensation. LTI plans have been expanding for many years, starting from the stock-related plans (stock options and restricted stock) of the 1950's and 1960's. A recent trend among bigger companies is to have multiple plans, typically stock related and company-performance related. More than one-quarter of the billion-dollar industrial companies in the 1982 Hay surveys had multiple plans.

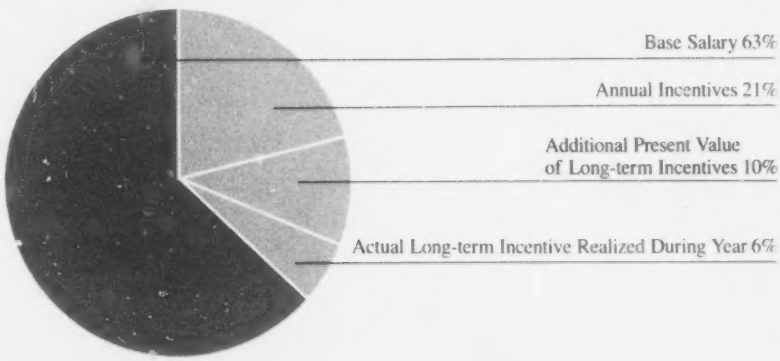
As shown in Exhibit 6, LTI grants are now a significant part of the executive picture. For a typical chairman and chief executive officer, this year's LTI grants have a potential value that nearly equals the annual incentive bonus paid for the most recent year. The value of LTI grants has remained at or above the 1981 level, indicating the vitality of these programs; on the other hand, the amount realized

Exhibit 6. Total Compensation By Executive Level

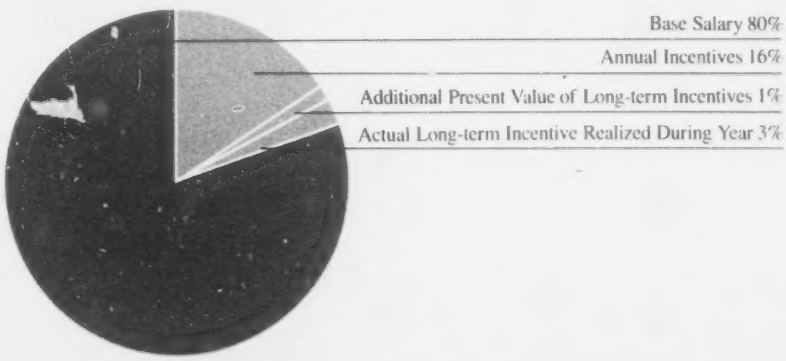
CHAIRMAN & CEO **$556,700**


Base Salary 58%
Annual Incentives 22%
Additional Present Value of Long-term Incentives 12%
Actual Long-term Incentive Realized During Year 8%

LARGE PROFIT CENTER MANAGER **$264,300**


Base Salary 63%
Annual Incentives 21%
Additional Present Value of Long-term Incentives 10%
Actual Long-term Incentive Realized During Year 6%

CONTROLLER **$88,900**


Base Salary 80%
Annual Incentives 16%
Additional Present Value of Long-term Incentives 1%
Actual Long-term Incentive Realized During Year 3%

this year was down from the 1981 survey, reflecting lower stock market prices.

Wage Increases Slowing

While hourly wage rates may seem unrelated directly to executive compensation levels, they are a good indicator of the pay marketplace that underlies salary structures at all levels. The hourly wage data show that basic wage increases have been braking since early 1981, and that the increases in 1982 are dramatically lower than in 1981. These data support our forecast of significantly lower executive pay increases this year.

It is increasingly evident that we may be leaving a long period when the United States as a whole tried to play a pseudo-positive-sum game. Everybody seemed to win, and anything seemed possible – but only because today's income increases became tomorrow's higher prices. The accompanying growth of "entitlements" produced not only a plethora of government programs; it produced a sense of economic progress that our national productivity sadly did not support. Costs of doing business grew tremendously, fueled in part by salary programs designed to "keep everyone whole" without sufficiently rewarding high performers; proliferation of organization levels and staff positions designed to offer as many promotions as possible; more and better benefits, consistent with new societal expectations and demands; and management incentive plans that have multiplied, but have not been tied closely enough to corporate performance.

The Coming Era

If we are really leaving the age of entitlements, the next era is not hard to see. Calls for productivity and performance improvement abound, although solid approaches to achieving them are rarer. Performance is particularly hard to define. Nevertheless, this direction is clear and its impact includes pay but goes far beyond it, beyond business organizations, beyond our work ethic and all the way to our national expectations.

To manage wisely in the performance era, we must do several things. We must recognize that the future, for perhaps as long as five years, is a zero-sum game. There will be losers as well as winners, and everyone will be forced to accept risk. Also, efficiency, particularly the entrepreneurial talent of making something out of nothing, will count more than sheer size. And, if pay for performance is to work, performance must be *defined strategically for each organization*. We must recognize that pay follows strategy, never leads it, that strategy must focus on underlying longer-term objectives, and that in many organizations the future will be unlike the past.

In examining the current link between pay and performance, many observers conclude that there is none. Our research indicates a relationship does exist over the years: in a carefully-paired sample of 72 companies, chief executives of better-performing companies earned 47 percent more over five years than chief executives of lower-performing companies.

Pay Levels and Prices

Nevertheless, it is important to remember the pay increase bands shown in Exhibits 4 and 5. In a zero-sum game, the total cash band might be centered significantly below 9 percent; in theory it should be close to the overall change in

How the Hay Job Unit System Works

The job evaluation system underlying the data in this article measures job content rather than job titles or the individuals holding specific jobs. Each job in a company is assigned a value in "units" of job content. The total units indicate the relative weight of each job.

The evaluation method analyzes three critical elements which are present in all jobs, though obviously in varying degrees, from mailroom clerk to chief executive officer:

1. *Know-How* – The sum total of every kind of knowledge and skill, however acquired, needed for satisfactory job performance.

2. *Problem Solving* – The intensity of the mental process required to identify, define, and resolve a problem. This covers the amount of original, self-starting thinking necessary for analyzing, creating, reasoning, and arriving at conclusions.

3. *Accountability* – The measured effect of the specific job on end results. This element is most important at managerial levels. It has three interrelated dimensions: the job's freedom to act; the magnitude of the end results; and the job's impact on these results – that is, has it got a primary impact, is the impact shared with others, or is it a staff advisory impact?

These three elements are combined to determine the total weight of the job in units of job content. The units, ranging from about 150 units for entry-level professional and supervisory positions to 1000 or more units for senior management jobs, show the relative weight that a company places on each management position. The salary structure of a company is the amount of dollars it pays for a unit of job content.

Since many companies use this specific process for determining job content and establishing compensation equity, we can compare their salary structures and measure the "going price" in the marketplace for any job content level.

For this report, model industrial and financial organizations are used to illustrate how familiar titles frequently fall around a number, although titles are not what's evaluated in the Hay System. The matches of these titles and company dimensions with assigned point values are approximate.

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gross national product. However, a pay survey average is unlikely to decline unless prices do. Even individual executives' pay will not mirror the organization's profitability.

A Large Marketplace

As shown earlier, pay levels are set in a large marketplace. Just as there is no need to double executive pay if profits double, similarly the organization cannot cut pay in half if profits are cut in half. And, viewed in a proper strategic framework, a year's profit is only one measure of performance.

The result of these realities is a set of principles to keep in mind both for planning executive compensation systems and for interpreting the results of future executive compensation surveys:

- The link of pay to performance is accomplished over time and the resulting distinctions in executive pay may seem small because the process can only operate within a relatively narrow pay marketplace.
- The search for true performance measures is only beginning, and many organizations may have to face up to different and lower expectations.
- The ability to control total personnel costs – both by reducing their absolute level through organizational efficiency and by bringing benefits and incentive costs back under control – is a crucial discipline, for which there is not yet an accepted measure.

The current recession and the consequent reduction of financial resources has resulted in significant pay actions, substantial work-force cuts, and renewed attention to productivity and performance in the private sector. But the needed change is not economic or political; it is *cultural*. Such change is never popular, and it cannot be confined to the private sector. It will take longer to tell whether a wider cultural change is in the making. Executives have the opportunity now, as never in the past generation, to be a force for change, by speaking out on the issues and by being willing to tie their compensation to the longer-term future. ■

Representative Positions at Various Job Unit Levels

	INDUSTRIAL		FINANCIAL	
	Light Manufacturing Company		Full-Service Commercial Bank	
Job Units	**Medium**—$300 Million Sales about 8,000 employees	**Large**—$1.4 Billion Sales about 20,000 employees	**Regional**—$2-5 Billion Assets $300-500 Million Operating Income 2000-4000 employees at least 100 branches	**Large**—$15-30 Billion Assets $1.25-2 Billion Operating Income; about 24,000 employees 100-500 branches
3000		Chairman & CEO		Chairman & CEO
2500		President & COO		President & COO
2000	Chairman & CEO		Chairman & CEO	
1500	President & COO	Division General Manager ($500 million division)	President & COO	Head of Commercial Banking Head of Retail Banking
1000	Division General Manager V.P. Manufacturing V.P. Finance V.P. Marketing	Division General Manager ($150 million division)	Head of Commercial Banking Head of Retail Banking	Head of Trust
600	Corporate Controller	General Manager Manufacturing Director of Engineering	Controller Head of Mortgage Lending Manager Branch Administration	Controller
400	Plant Manager Regional Sales Manager Chief Auditor Senior Attorney	Plant Manager Regional Sales Manager Chief Auditor Senior Attorney	Area Manager Commercial Loan Officer (national accounts)	Area Manager Commercial Loan Officer (national accounts)
200	General Foreman Design Engineer Accounting Supervisor	General Foreman Design Engineer Accounting Supervisor	Branch Manager Mortgage Loan Officer Trust Account Administrator	Branch Manager Mortgage Loan Officer Trust Account Administrator

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